

Appl. No. 09/804,004  
Amdt. dated January 7, 2005  
Reply to Office Action of December 28, 2004

Amendments to the Specification

*Please replace the following title:*

~~A method of manufacturing a semiconductor device~~

with:

A Method of Forming an Etch Stop Layer in a Semiconductor Device

Replace the following Abstract:

~~A method of manufacturing an electronic device, a semiconductor device in particular but not exclusively, which method comprises the steps of:~~

- ~~-applying a semiconductor substrate (1) which is provided with a conductor (3,4,5) at a surface (2), the conductor (3,4,5) having a top surface portion (6) and sidewall portions (7), of which at least the top surface portion (6) is provided with an etch stop layer (12) comprising silicon carbide,~~
- ~~-applying a dielectric layer (13),~~
- ~~-etching a via (14,15,16) in the dielectric layer (13) over the conductor (3,4,5), and stopping on the etch stop layer (12) to create an exposed part of the etch stop layer (12),~~
- ~~-removing the exposed part of the etch stop layer (12) inside the via (14,15,16) from at least the top surface portion (6) of the conductor (3,4,5),~~
- ~~-filling the via (14,15,16) with a conductive material (18).~~

There is a method of manufacturing a semiconductor device. In an example embodiment, the method comprises applying a semiconductor substrate that is provided with a conductor at a surface. The conductor has a top surface portion and sidewall portions, of which at least the top surface portion is provided with an etch stop layer comprising silicon carbide. A dielectric layer is applied. A via is etched in the dielectric layer over the conductor and, and stopping on the etch stop layer to create an exposed part of the etch stop layer. Inside the via from at least the top surface portion of the conductor, the exposed part of the etch stop layer is removed. The via is filled with a conductive material.